State of California Regional Water Quality Control Board San Diego Region

EXECUTIVE OFFICER SUMMARY REPORT September 8, 2004

ITEM: 17

SUBJECT: NPDES PERMIT RENEWAL: WASTE DISCHARGE

REQUIREMENTS FOR DUKE ENERGY, LLC, SOUTH BAY POWER PLANT, CHULA VISTA, SAN DIEGO COUNTY (TENTATIVE ORDER NO. R9-2004-0154, NPDES PERMIT

NO. CA0001368) (Hashim Navrozali)

PURPOSE: To hold a public hearing and receive comments from interested parties

regarding the tentative NPDES renewal permit for waste discharge requirements for the Duke Energy, LLC, South Bay Power Plant

(SBPP).

PUBLIC NOTICE: The NPDES permit hearing notice was published in the San Diego

Union-Tribune on June 25, 2004 for the Regional Board meeting originally scheduled for August 11, 2004. Copies of the tentative Order were mailed on June 25, 2004 to the discharger and to all known interested parties and agencies. Copies were made available for public review at the Regional Board office on June 25, 2004. The tentative Order was also posted on the Regional

Board's website on June 25, 2004.

These actions served as the 30-day official public notification for this action, as required by Title 40, Section 124.10 of the Code of

Federal Regulations.

Because of the cancellation of the August 11, 2004 meeting, the tentative Order was rescheduled to be presented to the Regional Board at its subsequent meeting on September 8, 2004. On July 16, 2004 a letter was sent to the interested parties notifying them of the change in the Regional Board meeting date regarding the tentative Order.

As of August 18, 2004 (the deadline to receive written comments on the tentative Order) comment letters from the San Diego Bay Council, Duke Energy, the City of San Diego Councilmember Donna Fry, and the U.S. EPA have been received (see Attachments 6, 7, 8, and 9). Staff will be preparing a response to comments document to address the written comments received and will be providing the document to Regional Board members in the Supplemental Agenda Mailing, prior to the September 8, 2004 hearing.

DISCUSSION:

Tentative Order No. R9-2004-0154 (*Waste Discharge Requirements Duke Energy South Bay, LLC, South Bay Power Plant, San Diego County*) renews and updates NPDES Permit No. CA0001368 and supersedes the current NPDES permit, Order No. 96-05, in its entirety. The tentative Order includes waste discharge requirements for the combined discharge of up to 601.13 million gallons per day (MGD) of elevated temperature once-through cooling water and other waste discharges from SBPP to south San Diego Bay.

The waste discharge requirements (including effluent and receiving water limitations, prohibitions, and monitoring requirements) contained in the tentative Order are based on the federal NPDES regulations, the federal technological based standards for steam electric power plant (40 CFR 123), the provisions of Sections 316(a) and 316(b) of the Clean Water Act (CWA) (power plant intake structure and thermal discharge regulations), the State Thermal Plan, the Basin Plan, the *Policy for Implementation of Toxic Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Implementation Policy), and the California Toxics Rule (CTR). The tentative Order also updates the waste discharge requirements in the NPDES permit to reflect the elimination of low volume and metal cleaning wastes from SBPP to San Diego Bay.

The tentative Order also incorporates where appropriate written comments provided by the public on the technical reports provided by Duke Energy on updated studies conducted at SBPP during 2003. The studies were conducted to assess the impact of the intake structures and the discharge from the South Bay Power Plant (SBPP) on the biological resources and beneficial uses of south San Diego Bay and to verify compliance with Clean Water Act (CWA) Sections 316(a) and 316(b).

All other effluent limitations, prohibitions, or monitoring requirements contained in the tentative Order are the same or more stringent than those in Order No. 96-05.

See attached Staff Report (Attachment 2) dated August 26, 2004 for a more detailed discussion of this Item.

**KEY ISSUES:** 

- 1. New total recoverable copper effluent limitations, pursuant to the *Implementation Policy* and CTR.
- 2. The requirement for Duke Energy to develop, submit, and implement a workplan to achieve compliance with the temperature effluent limitations at the Duke Energy property line (monitoring station S2).

3. The requirement for Duke Energy to perform a *Comprehensive Demonstration Study* to demonstrate that the power plant meets the technology and/or restoration compliance alternatives of the new Section 316(b) rule.

See attached Staff Report (Attachment 2) dated August 26, 2004 for a detailed discussion of the Key Issues.

LEGAL CONCERNS: None.

## SUPPORTING DOCUMENTS:

- 1. Location map.
- 2. Staff Report dated August 26, 2004.
- 3. Tentative Order No. R9-2004-0154 (including the Monitoring and Reporting Program and the Fact Sheet).
- 4. Copy of tentative Order transmittal letter, dated June 25, 2004.
- 5. Affidavit of Publication for newspaper public notice dated June 25, 2004.
- 6. Copy of San Diego Bay Council's comment letter, dated August 18, 2004.
- 7. Copy of Duke Energy's comment letter, dated August 18, 2004
- 8. Copy of City of San Diego Councilmember Donna Fry's comment letter, dated August 18, 2004.
- 9. Copy of U.S. EPA's comment letter, dated August 18, 2004.

## COMPLIANCE RECORD:

On January 30, 2002 the average daily Delta T (incremental temperature of discharge above that of ambient receiving water) for SBPP exceeded the permitted value of 15 degrees F, by 0.3 degrees F. This constituted a violation of Order No. 96-05. The discharger indicated that the Delta T exceedance was a random occurrence and that the operators at the power plant would be more vigilant in the future. A staff enforcement letter was subsequently issued to Duke Energy on March 26, 2004, noting the violation. No further enforcement action was taken regarding this violation.

No further effluent limitation violations of Order No. 96-05 have been noted in the last five years.

## SIGNIFICANT CHANGES:

See attached Staff Report (Attachment 2) dated August 26, 2004 for a summary of significant changes and new requirements that have incorporated into tentative Order No. R9-2004-0154, with respect to the current NPDES permit (i.e. Order No. 96-05):

RECOMMENDATION: Adopt tentative Order No. R9-2004-0154.